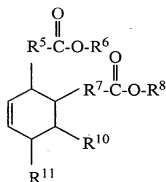


Amendments to the Claims

1. (Currently amended) A plasticized thermoplastic composition comprising one or more thermoplastics and a plasticizer compound selected from the group consisting of a dimerate ester plasticizer having formula I, a trimerate ester plasticizer having formula II, and mixtures thereof:

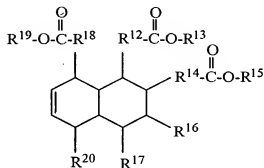


(I)

wherein R^5 and R^7 , same or different, are a $\text{C}_3\text{-C}_{24}$ hydrocarbon chain, straight chain or branched, either saturated or having 1 to 6 carbon-to-carbon double bonds;

R^6 and R^8 , same or different, are a $\text{C}_3\text{-C}_{24}$ ~~alkyl radical~~ hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds; and

R^{10} and R^{11} , same or different, are a $\text{C}_3\text{-C}_{24}$ saturated hydrocarbon chain, straight chain or branched, or an unsaturated $\text{C}_3\text{-C}_{24}$ hydrocarbon chain, straight chain or branched, having 1 to 6 carbon-to-carbon double bonds;



(II)

wherein R^{12} , R^{14} and R^{18} , same or different, are a C_3 - C_{24} hydrocarbon chain, straight chain or branched, either saturated or having 1 to 6 carbon-to-carbon double bonds;

R^{13} , R^{15} and R^{19} , same or different, are a C_3 - C_{24} ~~alkyl-radical~~ hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds; and

R^{16} , R^{17} and R^{20} , same or different, are a C_3 - C_{24} saturated hydrocarbon chain, straight chain or branched, or an unsaturated C_3 - C_{24} hydrocarbon chain, straight chain or branched, containing 1 to 6 carbon-to-carbon double bonds.

2. (Currently amended) A plasticized thermoplastic composition in accordance with claim 1, wherein:

R^5 and R^7 , same or different, are a C_6 - C_{24} hydrocarbon chain, straight chain or branched, either saturated or having 1 to 3 carbon-to-carbon double bonds;

R^6 and R^8 , same or different, are a C_3 - C_{18} ~~alkyl-radical~~ hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds, and

R^{10} and R^{11} , same or different, are a C_3 - C_{18} saturated hydrocarbon chain, straight chain or branched, or an unsaturated C_3 - C_{18} hydrocarbon chain, straight chain or branched, containing 1 to 3 carbon-to-carbon double bonds;

R^{12} , R^{14} and R^{18} , same or different, are a C_6 - C_{24} hydrocarbon chain, straight chain or branched, either saturated or containing 1 to 3 carbon-to-carbon double bonds;

R^{13} , R^{15} and R^{19} , same or different, are a C_3 - C_{18} ~~alkyl-radical~~ hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds; and,

R^{16} , R^{17} and R^{20} , same or different, are a C_3 - C_{18} saturated hydrocarbon chain, straight chain or branched; or an unsaturated C_3 - C_{18} hydrocarbon-chain, straight chain or branched, containing 1 to 3 carbon-to-carbon double bonds.

3. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer compound is present in an amount from about 0.1 parts to about 40 parts by weight per 100 parts of thermoplastic.

4. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer compound is present in an amount from about 0.5 parts to about 20 parts per 100 parts of thermoplastic.

5. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer compound is present in an amount from about 3 parts to about 15 parts per 100 parts of thermoplastic.

6. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the thermoplastic is selected from the group consisting of polyvinyl chlorides, nylons, propylene/ α -olefin copolymers, ethylene/ α -olefin copolymers, polyolefins, polystyrenes, acrylic resins, and combinations thereof.

7. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the thermoplastic is selected from the group consisting of ethylene/propylene copolymers, ethylene/1-octene copolymers, polypropylenes, and combinations thereof.

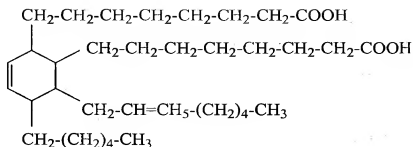
8. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer is an unsaturated diester formed by the reaction of a C_{36} dimer acid and a C_3 - C_{18} alcohol, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds.

9. (Original) A plasticized thermoplastic composition in accordance with claim 8, wherein the alcohol is 2-ethylhexyl alcohol.

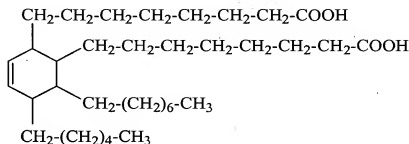
10. (Original) A plasticized thermoplastic composition in accordance with claim 8, wherein the alcohol is tridecyl alcohol.

11. (Original) A plasticized thermoplastic composition in accordance with claim 8, wherein the alcohol is oleyl alcohol.

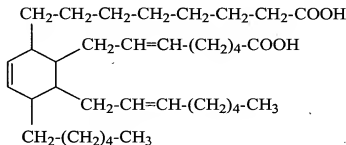
12. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer comprises a reaction product of the following dimer acid reacted with a C_3 - C_{24} alcohol:



13. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer comprises a reaction product of the following dimer acid reacted with a C₃-C₂₄ alcohol:



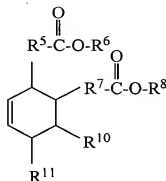
14. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer comprises a reaction product of the following dimer acid reacted with a C₃-C₂₄ alcohol:



15. (Original) A plasticized thermoplastic composition in accordance with claim 1, wherein the plasticizer comprises a reaction product of a C₃-C₂₄ alcohol reacted with a tricarboxylic acid having the following formula:

eicosapentaenoic; docosanoic; 13-docosenoic; docosatetraenoic; 4, 8, 12, 15, 19-docosapentaenoic; docosahexaenoic; tetracosenoic; and 4, 8, 12, 15, 18, 21-tetracosahexaenoic.

24. (Currently amended) A method of plasticizing a thermoplastic composition including one or more thermoplastics, comprising adding to said thermoplastic composition, in an amount of about 0.1 parts to about 40 parts by weight per 100 parts of thermoplastic, a plasticizer compound selected from the group consisting of a cyclic dimerate ester plasticizer having formula I, a trimerate ester plasticizer having formula II, and mixtures thereof:

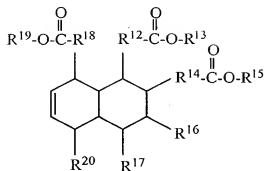


(I)

wherein R⁵ and R⁷, same or different, are a C₃-C₂₄ hydrocarbon chain, straight chain or branched, either saturated or having 1 to 6 carbon-to-carbon double bonds;

R⁶ and R⁸, same or different, are a C₃-C₂₄ ~~alkyl radical~~ hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds; and

R¹⁰ and R¹¹, same or different, are a C₃-C₂₄ saturated hydrocarbon chain, straight chain or branched, or an unsaturated C₃-C₂₄ hydrocarbon chain, straight chain or branched, having 1 to 6 carbon-to-carbon double bonds;



(II)

wherein R^{12} , R^{14} and R^{18} , same or different, are a C_3 - C_{24} hydrocarbon chain, straight chain or branched, either saturated or having 1 to 6 carbon-to-carbon double bonds;

R^{13} , R^{15} and R^{19} , same or different, are a C_3 - C_{24} alkyl radical hydrocarbon chain, straight chain or branched, saturated or unsaturated containing 1 to 3 carbon-to-carbon double bonds; and

R^{16} , R^{17} and R^{20} , same or different, are a C_3 - C_{24} saturated hydrocarbon chain, straight chain or branched, or an unsaturated C_3 - C_{24} hydrocarbon chain, straight chain or branched, containing 1 to 6 carbon-to-carbon double bonds.

25. (Original) A method in accordance with claim 24, wherein the plasticizer compound is added in an amount from about 0.5 parts to about 25 parts by weight per 100 parts of thermoplastic.

26. (Original) A method in accordance with claim 24, wherein the plasticizer compound is added in an amount from about 3 parts to about 15 parts per 100 parts of thermoplastic.